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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,355	09/08/2003	Yu-Chin Lai	P03313	9551

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EXAMINER

ZIMMER, MARC S

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 05/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/657,355

Applicant(s)

LAI ET AL.

Examiner

Marc S. Zimmer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6, 8, 10, 11, 15, 16, 18-21 and 26-31 is/are allowed.
- 6) ☒ Claim(s) 7, 12 and 22-25 is/are rejected.
- 7) ☒ Claim(s) 7, 9, 12-14 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 09/08/03, 02/23/05.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

Specification

The Specification is objected to because the structure in formula IV is discontinuous. In particular, the residues that are supposed to be attached to aromatic rings are drawn in space where they don't even appear to have any chemical relationship with the aromatic azo residue. Correction is required.

Claim Suggestion

In claims 1 and 7, the circumstances surrounding the meaning of the U group would be better stated as, "the U group is either absent or, where present, is a difunctional linkage."

Claim Objections

Claim 9 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 1 already stipulates that a residue having blue light absorption properties must be present.

Claims 13-14 and 23-24 are objected to because there is no indication that the silica filler has been treated with any compound that would introduce polymerizable groups onto its surface. Claims 11 and 21 require the strengthening agent to be polymerizable as the prepolymers are said to be copolymerized with, among other things, strengthening agents. Silica obviously cannot participate in the copolymerization.

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Claim 17 is objected to because the structure of an "aminosilanolate" is not clear. The suffix "-ate" indicates a negative charge associated with the silanolate so wouldn't there have to be a corresponding counterion? Also, it appears that mention of potassium/aminosilanoate is only appropriate in conjunction with the preparation of the prepolymer itself. Indeed, Applicant is referred to Example 5 where potassium silanoate is used as a copolymerization catalyst for the formation of the prepolymer. According to the Specification, the prepolymer would then, in turn, either be (i) copolymerized with other monomers having polymerizable groups, (ii) be crosslinked with a crosslinker, e.g. an organohydrogensiloxane, or both. It is not clear that the silanoate compounds would have a role in any subsequent polymerization of vinylic monomers or crosslinking reaction so their mention in claim 17 seems questionable.

A period at the end of claim 22 should be removed.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 7 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The Examiner has no idea as to how the phrase, "which renders the prepolymer with multiple blocks of polysiloxane groups." First of all, there is no suggestion elsewhere in

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the original disclosure that the prepolymer is comprised of blocks. Indeed, the Examiner is under the assumption that there is a random distribution of repeat units having 2 R² substituents, R³ and R⁴ substituents, and R⁵ and R⁶ substituents. Further, it is not clear how the term "render" is to be treated here. What does the prepolymer become by way of this rendering? Clarification is needed.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 12 and 22-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. As for claims 12 and 22, the term "high" as in "high refractive index" is subjective and prone to multiple interpretation. Applicant must clarify what exactly constitutes a high refractive index macromonomer. In paragraph 29, it is stated that a refractive index for the overall composition of 1.42 or greater is sought. It is submitted that Applicant consider adding this figure as a means of better defining their invention.

As for claims 23-25, there is no antecedent basis in claim 22 for the reinforcing component set forth in claims 22-25. It is believed that Applicants had intended to allude to the strengthening agent.

Allowable Subject Matter

Claims 7, 9, 12-14, 17, and 22-25 would be allowable if rewritten to overcome the various objections and/or rejection(s) under 35 U.S.C. 112, 1st and 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. Claims 1-6, 8, 10-11, 15-16, 18-21, and 26-31 are allowable.

The only prior art of any real significant is Ichinohe, U.S. Patent # 6,878,792. They disclose the preparation of siloxane polymer bearing yellow dye molecules pendant to the polymer backbone that are introduced by way of hydrosilylation. As in the present case, the dye molecules are attached so as to provide a blue light absorption capability to the polymer. The dye-modified polysiloxane is employed in the medical field as an intraocular lens. However, whereas the polymers displayed in claim 1 necessarily contain polymerizable groups at both termini of the linear polymer, no such groups are present in the siloxane polymers taught by the reference. In a separate embodiment of their invention, Ichinohe discloses acrylic polymers synthesized by copolymerizing the dye, which of course features free-radical polymerizable groups, with one or more acrylic monomers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc S. Zimmer whose telephone number is 571-272-1096. The examiner can normally be reached on Monday-Friday 8:00-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

May 9, 2005

Marc Zimmer

Marc Zimmer

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